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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,152	02/13/2002	Andre Booyesen	14891	9186

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EXAMINER

SONG, HOON K

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,152

Applicant(s)

BOOYSEN ET AL.

Examiner

Hoon K Song

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 15 is/are rejected.
- 7) ☒ Claim(s) 5-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 5-14 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kemner et al. (US 4051377).

Regarding claim 1, Kemner teaches an imaging apparatus comprising:

a radiation source (1) for generating an imaging beam;

a camera array (3) comprising a plurality of cameras responsive to the imaging beam and arranged adjacent one another, each camera having an output for generating image signals;

drive means (9) for moving the radiation source and the camera array relative to a subject (8);

signal processor means (17) arranged to receive image signals from the data output of each camera and to generate composite image data therefrom;

memory means (16) for storing the composite image data;

output means (18) for displaying an image generated from the composite image data; and

control means responsive to the image signals to control the operation of the drive means according to the intensity of the imaging beam (column 3 line 65+).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karellas (US 6445767B1) in view of Kemner.

Regarding claim 1, Karellas teaches an imaging apparatus comprising:

a radiation source (12) for generating an imaging beam;

a camera array (23) comprising a plurality of cameras responsive to the imaging beam and arranged adjacent one another, each camera having an output for generating image signals;

drive means (figure 23) for moving the radiation source and the camera array relative to a subject;

signal processor means arranged to receive image signals from the data output of each camera and to generate composite image data therefrom;

memory means (32) for storing the composite image data;

output means (36) for displaying an image generated from the composite image data.

However Karellas fails to teach control means responsive to the image signals to control the operation of the drive means according to the intensity of the imaging beam.

Kemner teaches the control means.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to adopt the control means of Kemner in the imaging apparatus of Karellas in order to output a constant intensity (column 3 line 65+). One would be motivated to adopt the control means because it would prevent over dosing with respect to the intensity desired for the measuring accuracy (column 1 line 35+)

Regarding claim 2, Karellas teaches that the radiation source is an X-ray source (12) and the cameras comprise scintillators (20) and associated charge-coupled devices (24) for generating digital image data signals.

Regarding claim 3, Karellas teaches that the camera array is arranged so that fields of coverage of adjacent cameras overlap in a direction transverse to the direction of movement of the camera array, so that the camera array provides full coverage of an elongate imaging zone defined thereby (figure 22a).

Regarding claim 4, Karellas teaches that each camera has an active area with a parallelogram shape, with adjacent ends of the respective active areas abutting, so that the coverage of adjacent cameras overlaps in a relatively narrow transition zone extending transversely to the direction of scanning (figure 22a).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon Song whose telephone number is 703-308-2736. The examiner can normally be reached on 8:30 AM - 5 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on 703-308-4858. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Hoon Song HCS


EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER